

REMARKS

In the above-identified Office Action Claim 31 was rejected under 35 U.S.C. 112. In response, Applicants have cancelled claim 31.

All of the pending claims were rejected, in the above-identified Office Action, as being obvious in view of a hypothetical combination of the cited Kataoka and Ohta references. In this regard, Applicants respectfully submit that such a combination of references requires the improper use of hindsight in order to provide an impetus for combining those references to reject Applicants' claims.

Referring first to Applicants' amended independent Claim 14, a stacked structure is called for, including a front surface member, an encapsulant layer, a photovoltaic element, another encapsulant layer, and a back surface member. The encapsulant layer next to the front surface member comprises a hot melt polymer resin having an ultra-violet absorbing agent dissolved therein with a concentration gradient which provides a higher concentration at the side thereof adjacent the front surface member. In the Office Action it is argued that although the Kataoka reference does not disclose such a gradient, it would allegedly be obvious to provide such a gradient in view of the disclosure in the Ohta patent. What Ohta discloses is a flame retardant substance at an outer surface of an encapsulant layer on a semiconductor, wherein that flame retardant layer is provided with a gradient so that the concentration of the flame retardant material is greater on its outer face than it is on the portion thereof adjacent to the semiconductor. The only reason given for that gradient in Ohta is to minimize the total amount of the flame retardant, thereby reducing "the possibility of polluting the environment" (Col. 17, lines

23-24). Also, Ohta discusses in Col. 18 that a concentration of colorant may be more pronounced at the interior of the resin package as compared to the exterior surface thereof, and vice versa, so that the outer portion of the package may be reflective, whereas the inner portion thereof may be black in an attempt to avoid erroneous operation by irradiation. None of these recitations in Ohta, however, suggest an impetus for using a gradient of a dissolved ultra-violet absorbing agent as required in Applicants' amended Claim 14. That is, in Applicants' invention the gradient is provided in order to reduce the generation of bubbles which occurs when the ultra-violet absorbing agent is cured within the encapsulant resin. Nothing in the Ohta patent suggests the use of a gradient to overcome the effect of such bubbles. Instead, in the Office Action, a hindsight approach is taken in reliance on a boot strap argument that Ohta suggests the use of a gradient "to improve a property which is improved when the additive exists at one surface of the encapsulant without deteriorating a property which is deteriorated when the additive exists at the opposite surface". In the case of Applicants' claims, this broad statement does not apply because no property would be deteriorated if the additive existed at the low concentration side of the gradient. That is, the existence of the ultra-violet absorbing agent at the surface closest to the photovoltaic element would not cause a deterioration of a property of Applicants' claimed device. Instead, it is the overall reduction in the concentration of the ultra-violet absorbing agent which is desired, thus reducing the generation of bubbles during manufacture, and this problem and Applicants' solution is not suggested anywhere in the Ohta patent.

In addition, none of the cited references, no matter how they may be combined, suggest Applicant's claimed structure.

For all of these various reasons Applicants respectfully submit that this application is in condition for allowance and a formal Notice of Allowance is solicited.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "J. Krane", is written over a horizontal line.

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